



892 OLD EAGLE SCHOOL ROAD, SUITE 916
WAYNE, PENNSYLVANIA 19087
215-887-9510

164398

our **3**th year

January 13, 1987
C-585-1-7-34
68-01-7346

ORIGINAL
(Red)

Mr. Harold Byer
U.S. Environmental Protection Agency
841 Chestnut Building
Ninth and Chestnut Streets
Philadelphia, PA 19107

Subject: Sampling Plan
TDD No. F3-8612-63
Kennett Square Junkyard
Kennett Square, Pennsylvania

Dear Mr. Byer:

The site inspection for the subject site has been tentatively scheduled for January 20, 1987. Permission for access will be coordinated with Ms. Lorie Acker, site inspection officer of EPA. Mr. Harry Dow, of EPA, and Thomas Sheehan, of the Pennsylvania Department of Environmental Resources (PA DER), will accompany the FIT during the inspection.

Summary

The site is an inactive junkyard which had a fire in 1980. Runoff from the fire was observed flowing into the West Branch of Red Clay Creek. Sampling at points downstream of the site by the United States Geological Survey (U.S.G.S.) in 1984 showed elevated levels of phenols and coal tars, which may have been a result of the fire. Debris from the fire has been stored on site in a waste pile. Scrap metal is being removed as the site owners are in the process of selling the property.

PA DER sampled the creek after the fire in 1980; full priority pollutant analysis has not been conducted since that time. The Chester County Health Department conducted a sampling for volatile organics in the creek in 1983 as part of a regional survey evaluating impacts created by the area's mushroom industry. The United States Fish and Wildlife Service also conducted a macrobiotic survey of the creek.

Drinking Water Supply

The borough of Kennett Square supplies water to all residents and industries within borough limits. (b) (9)

(b) (9)

A total of 5,000 people are served by these sources. The Southeastern Chester County Authority also serves a portion of the population within the vicinity of the site. Private wells are located at several residences in the vicinity of the site outside of the Kennett Square borough limits. In addition, the mushroom industry plants in the area utilize wells for processing and potable water supply. A FIT III well survey, conducted January 21, 1986, has identified well locations in the site vicinity.

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Groundwater Information

The site is underlain by the Cockeysville Marble, which contains a well-developed system of joints. Groundwater movement and storage takes place largely in these joints. The weathered zone is well formed, enhancing storage capacity at shallow depths. Depth to groundwater is 40 to 60 feet and yields of 100 gallons per minute are common.

A U.S.G.S. report, "Groundwater Resources of Chester County, Pennsylvania," indicates that groundwater moves from recharge points in upland regions to discharge points in valleys and streams. With rare exception, streams in Chester County act as drains for the groundwater reservoir.

Based upon the FIT III well survey of January 6, 1986 and the geologic setting of the Kennett Square Junkyard, there are no wells within the immediate site vicinity that would accurately represent site area groundwater conditions.

Geology Information

Lying within the Piedmont Province of the Appalachian Highlands, the site is situated in a valley floored by the Cockeysville Marble. Formations within a three-mile radius of the site are representative of an area degraded by regional metamorphism, which has formed bank-like features that trend southwest to northeast across the region.

The Cockeysville Marble is a white to light gray, medium- to coarse-grained marble, which is approximately 400 feet thick. The weathered zone is 40 to 60 feet in depth and, therefore, enhances water storage capacity at these depths.

Sampling to Date

PA DER sampled the West Branch of Red Clay Creek after the 1980 fire. The U.S.G.S. conducted a 1984 sampling in the region and identified phenols as well as coal tars in Red Clay Creek sediments. The only other samplings have been macrobiotic surveys conducted by the United States Fish and Wildlife Service and a 1983 Chester County Health Department study of the mushroom industry's impacts on surface waters.

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Kennett Square Junkyard Sampling Plan

Proposed Sample Locations

The proposed sample locations included the following:

- o The waste pile on site will be sampled in accordance with WPSI-1, Sections 8.4.5 and 8.4.5.1 for waste piles.
- o The runoff channel created by the firefighting efforts will be sampled. A surface soil sample(s) will be obtained according to WPSI-1, Rev. 1, Sections 8.4.5 and 8.4.5.1.
- o The West Branch of Red Clay Creek will be sampled at locations upstream and downstream of the site, as well as at the point where the runoff channel meets the creek. Aqueous samples will be obtained according to WPSI-1, Rev. 1, Sections 8.4.2 and 8.4.2.1. Sediment samples will be collected in accordance with WPSI-1, Rev. 1, Section 8.4.4.1.
- o Additional sample locations may be selected based on field judgment.

The number of samples to be obtained is five aqueous and seven solids, including blanks and duplicates. Sample analysis will be performed for organics and inorganic tasks 1 and 2, and 3 for cyanide.

non responsive based on revised scope

has been appointed Team Leader and will be responsible for the sampling plan.

Please endorse below and return with your approval or amendments to this plan. If you have any questions, do not hesitate to call either non responsive based on revised scope or me.

Respectfully,

MM

"non responsive based on revised scope"

Manager, FII III

Assistant Manager

Quality Assurance

GG/cv

Attachment

Approved by: _____

Date: _____

Amendments: _____

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